LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An ultrasonic puncture needle comprising:

a sheath adapted for insertion into a treatment tool insertion channel of an ultrasonic endoscope; and

a pipe-shaped needle tube for being inserted into tissue within the body cavity through the sheath, which includes,

a cutting tip portion formed in a sharp shape with a smaller cross-section in a tip-ward direction, the cutting tip portion being provided on a tip side of the needle tube and having a cut surface intersecting with a circular surface of the needle tube, and

a plurality of staggered-array annular-shaped recesses ~~formed after formation of the cutting tip portion, the annular-shaped recesses~~ having bottoms and sides which are regions to face a scanning face of an ultrasonic transducer included in the ultrasonic endoscope and flat surfaces on the bottoms and the sides with smoothly curving interfaces therebetween, each of the annular-shaped recesses being non-partially formed and provided from a back surface of the cutting tip portion near a tip of the needle tube on which the cutting tip portion is formed to a predetermined range on a surface of a tip portion of the needle tube, which is an area excluding the cut surface of the cutting tip portion.

2. (Previously Presented) The ultrasonic puncture needle according to Claim 1, wherein the plurality of annular-shaped recesses are arrayed so as to be spread in a radial pattern from the tip of the needle tube.

3. (Previously Presented) The ultrasonic puncture needle according to Claim 1, wherein the multiple annular-shaped recesses are formed using a laser apparatus or an electric discharge machining apparatus.

4. (Previously Presented) The ultrasonic puncture needle according to Claim 3, wherein the multiple annular-shaped recesses are formed using a laser apparatus or an electric discharge machining apparatus under positioning control set so that the annular-shaped recesses have no adverse effects on a cutting-tip portion forming the needle tube due to overlap of the annular-shaped recesses and the cutting-tip portion.

5. (Currently Amended) An ultrasonic puncture needle comprising a pipe-shaped needle tube adapted for insertion into a treatment tool insertion channel of an ultrasonic endoscope so as to be inserted into tissue within the body cavity, wherein the needle tube includes:

a cutting tip portion formed in a sharp shape with a smaller cross-section in a tip-ward direction, the cutting tip portion being provided on a tip side of the needle tube and having a cut surface intersecting with a circular surface of the needle tube, and

a plurality of annular-shaped recesses ~~formed after formation of the cutting tip portion, the annular-shaped recesses~~ having bottoms and sides which are regions to face a scanning face of an ultrasonic transducer included in the ultrasonic endoscope and flat surfaces on the bottoms and the sides with smoothly curving interfaces therebetween, each of the annular-shaped recesses being non-partially formed and provided from a back surface of the cutting tip portion near a tip of the needle tube on which the cutting tip portion is formed to a predetermined range on a surface of a tip portion of the needle tube, which is an area excluding the cut surface of the cutting tip portion .

6. (Previously Presented) The ultrasonic puncture needle according to Claim 5, wherein the plurality of recesses are arrayed so as to be spread in a radial pattern from the tip of the needle tube.

7. (Previously Presented) The ultrasonic puncture needle according to Claim 5, wherein the plurality of recesses are formed at positions such that overlap of the recesses and the cutting-tip portion does not occur.

8. (Previously Presented) The ultrasonic puncture needle according to Claim 6, wherein the plurality of recesses are formed at positions such that overlap of the recesses and the cutting-tip portion does not occur.

9. (Previously Presented) The ultrasonic puncture needle according to Claim 5, wherein the plurality of recesses are formed in the annular-shape using a laser apparatus or an electric discharge machining apparatus.

10. (Previously Presented) The ultrasonic puncture needle according to Claim 6, wherein the plurality of recesses are formed in the annular-shape using a laser apparatus or an electric discharge machining apparatus.

11. (Previously Presented) The ultrasonic puncture needle according to Claim 7, wherein the plurality of recesses are formed in a annular-shape using a laser apparatus or an electric discharge machining apparatus.

12. (Currently Amended) An ultrasonic puncture needle comprising:

a puncturing portion formed with a suitable length at the tip of the ultrasonic puncture needle; and

a tube portion formed in the shape of a tube at the rear end of the puncturing portion, wherein the puncturing portion is formed of a cutting tip~~cutting-tip~~ portion having a sharp shape with a smaller cross-section in a tip-ward direction, the cutting tip portion being provided on a tip side of the puncturing portion and having a cut surface intersecting with a circular surface of the needle tube, and a tube-shaped portion formed as an extension of the tube portion, which includes a plurality of annular-shaped recesses ~~formed after formation of the cutting tip portion, the annular-shaped recesses~~ having bottoms and sides which are regions to face a scanning face of an ultrasonic transducer included in the ultrasonic endoscope and flat surfaces on the bottoms and the sides with smoothly curving interfaces therebetween, each of the annular-shaped recesses being non-partially formed and provided from a back surface of the cutting tip portion near a tip of the needle tube on which the cutting tip portion is formed, said annular-shaped recesses being formed on the surface of the tip portion of the needle tube, which is an area excluding the cut surface of the cutting tip portion .

13. (Previously Presented) The ultrasonic puncture needle according to Claim 12, wherein the plurality of annular-shaped recesses are formed and arrayed so as to be spread over a predetermined range on the surface of the tip portion in a radial pattern from the tip of the tube portion on the back side of the cutting-tip portion.

14. (Previously Presented) The ultrasonic puncture needle according to Claim 13, wherein the plurality of annular-shaped recesses are formed using a laser apparatus or an electric discharge machining apparatus.

15. (Previously Presented) The ultrasonic puncture needle according to Claim 14, wherein the plurality of annular-shaped recesses are formed at positions such that overlap of the recesses and the cutting-tip portion forming the needle tube does not occur, using a laser apparatus or an electric discharge machining apparatus.

16. (Previously Presented) The ultrasonic puncture needle according to Claim 12, wherein the ultrasonic-reflection means comprises a plurality of recessed portions formed and arrayed so as to be spread in a predetermined range on the surface of the tip portion in a radial pattern from the tip of the tube portion on the back side of the cutting-tip portion.

17. (Previously Presented) The ultrasonic puncture needle according to Claim 16, wherein the plurality of recessed portions are formed at positions such that overlap of the recessed portions and the cutting-tip portion does not occur.

18. (Previously Presented) The ultrasonic puncture needle according to Claim 16, wherein the plurality of recessed portions are formed in the annular-shape using a laser apparatus or an electric discharge machining apparatus.

19. (Previously Presented) The ultrasonic puncture needle according to Claim 17, wherein the plurality of recessed portions are formed in the annular-shape using a laser apparatus or an electric discharge machining apparatus.

20. (New) The ultrasonic puncture needle according to Claim 1, wherein each of the annular-shaped recesses is a circumferential recess formed such that a center portion thereof remains as a protrusion.

21. (New) The ultrasonic puncture needle according to Claim 20, wherein the circumferential recess of each of the annular-shaped recesses is provided in plurality in a full annular shape.

22. (New) The ultrasonic puncture needle according to Claim 5, wherein each of the annular-shaped recesses is a circumferential recess formed such that a center portion thereof remains as a protrusion.

23. (New) The ultrasonic puncture needle according to Claim 22, wherein the circumferential recess of each of the annular-shaped recesses is provided in plurality in a full annular shape.

24. (New) The ultrasonic puncture needle according to Claim 12, wherein each of the annular-shaped recesses is a circumferential recess formed such that a center portion thereof remains as a protrusion.

25. (New) The ultrasonic puncture needle according to Claim 24, wherein the circumferential recess of each of the annular-shaped recesses is provided in plurality in a full annular shape.